RESPONSE TO:

**Louisville Metro Government - Request for Information
Broadband Infrastructure Upgrade and Expansion**

LouisvilleKy.gov

PREPARED BY

fibertech networks®

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Executive Summary

Fiber Technologies Networks, L.L.C. (Fibertech), and Greenlight Networks are pleased to have the opportunity to jointly respond to this Request for Information (RFI) to supply the City of Louisville with a strategic partnership to maximize the City-owned optical fiber network in Louisville. We are extremely excited about the prospect of working with the City of Louisville and further assisting in the operation and expansion of infrastructure that will not only support and enable the ever-developing technology and communications requirements for City administration, but will also act as both an economic development tool with subsequent sales through the partnership.

With more than 13 years of experience building, managing and operating metropolitan fiber networks, we feel the City of Louisville's ideal partner encompasses a company that can be counted on to continue to invest in the growth of this network while maintaining it at carrier-grade level SLAs. This endeavor requires a partner with a strong track record set to serve both the private and public sector with cost-effective broadband solutions; a company with immediate commitments to expand the network; and a company committed to the long-term success of the partnership along with the financial stability and direction to fulfill those commitments.

Fibertech and Greenlight feel strongly that together, we are uniquely positioned to be that partner. For more than a decade, FIbertech has built and operates one of the fastest growing metro fiber providers in the Northeast. To date, the company operates more than 10,000 route miles of metro networks operational in 29 markets. The company has grown at record levels since beginning operations in May 2000. Headquartered at 300 Meridian Centre, Rochester, NY, (585) 697-5100, Fibertech has networks operational in Pittsburgh, PA; Indianapolis, IN; Akron, Cleveland, Cincinnati, Columbus, Dayton and Toledo, OH ; Providence, RI; Hartford, Bridgeport, Stamford, Danbury, New London and New Haven, CT; Springfield and Worcester, MA; Syracuse, Rochester, Buffalo, Binghamton, White Plains and Albany, NY; Dover and Wilmington, DE; Montgomery County, MD; Trenton, Newark and Atlantic City, NJ; and suburban Philadelphia. The company also recently announced it will build a 770-mile network in metropolitan Detroit.

Since our inception, Fibertech has secured more than 6,000 dark fiber and connectivity contracts to business and enterprise customers over the networks that we've put in place. This has allowed the company to expand its footprint rapidly while expanding an alternative fiber footprint throughout the metropolitan areas that we operate within. Typically, our original core networks encompassed about 100 route miles. Today, our average network size is over 300 miles. We feel this growth can be contributed to a number of the same factors that make us the optimal partner for the City of Louisville:

- Fully-staffed, 24x7x365 Network Operations Center
- Award-winning implementation, network performance and customer service
- Strong financial position and balance sheet
- Conservative, organic customer growth

- Privately funded
- Vast experience in fiber construction, management and maintenance
- Successful, sustainable business model for open-access fiber networks
- Entrepreneurial and flexible with a service culture that supports long-term relationships
- Highly experienced sales and marketing organization
- Ability and experience in serving local and state governments, including an 12-year provider relationship with the State of Connecticut, connecting education, judicial, administrative and public safety facilities throughout the state with service commitments extending for over 20 years into the future.

In addition, Fibertech has received national recognition for eight consecutive years in the Business Connectivity Report Card Survey conducted by ATLANTIC-ACM. This industry survey is widely regarded as the broadest benchmarking tool in business telecommunications. The results are from individual customer ratings in a carrier-wide survey of network services and the operations behind those services.

Fibertech was recognized among the CLEC/Cable/Fiber peer group with first place awards in six different categories:

» **Brand**
» **Sales Representatives**
» **Billing**
» **Customer Service**
» **Provisioning**
» **Network Performance**

Dr. Judy Reed Smith, CEO of ATLANTIC-ACM stated, "Fibertech has truly set itself apart from the field with their operations scores. Fibertech's definitive win in a number of key customer satisfaction related categories indicates an exceptionally high level of customer service, and their wins in the value categories indicate competitively priced, high quality products, which only helps to make customers happier."

At the same time, Greenlight Networks has emerged in Rochester, NY as a high quality, high-speed residential broadband internet provider at speeds of 100 meg to 1 Gig.

Greenlight Networks, LLC ("Greenlight") is based in Penfield, NY, a suburb of Rochester, NY. Rochester is one of the top 10 high-tech areas of the United States, and it has been a hotbed of telecommunications competition and innovation since the mid-90s.

Internet bandwidth is exploding again. Most experts predict that Internet bandwidth will grow 500% in just the next few years. Why? Look around any home, apartment, or dorm room today, and you'll find the answer. iPhones, iPads, PCs, Xboxes, smart TVs and other devices that connect to the Internet are being used to download and stream TV shows, movies, and other videos.

Companies like Apple, Netflix, Hulu, Google, YouTube, and Microsoft are all creating wonderful ways for everyone to watch what they want, where they want, on almost any device imaginable. This generational change means that people will need far more bandwidth than today's networks offer. The metal phone and cable wires connecting homes, apartments, and buildings are simply not as capable of sending and receiving information as fiber-optic cables.

While access to fiber is available in some of America's largest cities, small and mid-sized cities have been overlooked up to this point. Because we live here, we think it's time for the people of these communities to experience a better Internet experience over an all fiber network.

To provide all the bandwidth needed to meet this challenge, we build our own fiber connections to our clients, so we can provide an extremely fast and affordable Internet service. We also believe that when our customers use our ultra high-speed service, they will find exciting new ways to use the Internet for entertainment, in much the same way the Internet has evolved from when we used dial-up!

We can't wait to see what our customers can do with this much bandwidth!

Founded in 2011, Greenlight's initial deployments included Multiple Dwelling Units ("MDUs") where fiber-optic cables were installed to provide residents with an ultra high-speed Internet service. Greenlight received its Certificate of Public Convenience and Necessity ("CPCN") from the New York State Public Service Commission in 2012, and negotiated agreements with the utilities for access to poles and conduits.

Greenlight began offering fiber-optic Internet service to single family homes in Pittsford, NY in the spring of 2013. Greenlight continues to expand to additional neighborhoods throughout the Greater Rochester area based on customer demand and construction costs. More information can be found at:

http://www.greenlightnets.com

http://www.facebook.com/greenlightnetworks

http://www.twitter.com/greenlightfiber

In response to the Louisville RFI's three goals:

Creating a world-leading gigabit-capable network across the city or in targeted commercial corridors, as well as in residential areas with demonstrated demand, to foster innovation, drive job creation and stimulate economic growth;

Provide free or heavily-discounted gigabit 100MB (minimum) internet service over a wired or wireless network to underserved and disadvantaged residents across Louisville;

4

Deliver gigabit internet service at prices comparable to other gigabit fiber communities across the nation.

Greenlight Networks Response

In our Rochester, NY area deployments, Greenlight has followed a similar strategy to Google Fiber, building networks and prioritizing deployments where customer demand is greatest. Our all fiber-optic network uses proven technologies to cost-effectively deploy Internet services up to a Gigabit. Our fiber-optic network also provides us with the ability to readily upgrade the network to meet additional bandwidth growth in the future.

Greenlight's standard service offering is 100Mbps/20Mbps in the Rochester, NY area. Greenlight charges $50 per month and waives the $100 installation charge for customers who sign-up for installation during the initial construction phase. Gigabit service is also available for $250 per month, and we anticipate that the scale of this RFI would allow us to offer Gigabit Internet service at a significant discount. Greenlight also works with local developers to provide our Amazingly Fast Internet service to residents of MDUs.

Construction costs in urban areas are often higher than costs in suburban areas, generally due to the increased costs of underground construction and access to Rights-of-Way. Louisville seems to understand many of these challenges. Greenlight seeks a mutually beneficial situation where costs savings from construction, make-ready, etc. will be passed on to the residents and businesses of the community.

Partnering with Fibertech Networks on our Louisville deployment will allow us to efficiently move to neighborhoods around Louisville. This partnership has worked extremely well in Rochester, and we believe it will work for Louisville.

Unfortunately, we became aware of the RFI late in the process and missed both the period for submitting questions and for conducting ample investigation for a complete response. With that said, we do believe that a combination of Fibertech Networks and Greenlight Networks provides the City of Louisville to optimally reach its short and long term goals as presented in the RFI.

We apologize for the lack of specificity that we can provide at this time, but do feel that we are exactly the combination of enterprises that the City seeks to draw to the Louisville market. We believe that our joint capabilities and credentials are uniquely positioned to aid the City in reaching its long-term goals and we hope to have the opportunity to pursue that vision throughout the City's RFI/RFP process.

In conclusion, Fibertech feels it is the ideal partner for this strategic relationship with Louisville and one that the City could count on with confidence over the long term. We welcome the opportunity to answer any additional questions and look forward to the opportunity to provide the City of Louisville with the best possible partnership for operating its fiber optic infrastructure.

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III.   OBJECTIVES OF RFI

LMG is committed to making the critical investments and policy modifications required to ensure that it is prepared to meet the demands of a 21st Century economy. LMG must provide the resources necessary for businesses, residents, and government to succeed and thrive in order to build on the economic base it has already established and to be a global leader and pioneer. Availability of and access to a high-speed broadband network has quickly become viewed as critical urban infrastructure, similar to electricity, water, and roadways. Today, currently-available speeds do not provide an adequate foundation to propel the city forward in a technology-based economy.

Goal 1: Create a world-leading gigabit-capable network in residential neighborhoods and commercial corridors with demonstrated demand, to foster innovation, drive job creation, and stimulate economic growth.

A first step toward achieving affordable high-speed internet access could include building upon existing LMG-owned fiber to focus on providing immediate access to households in locations near this fiber. In addition, this access should be provided in selected areas where there is a demonstrated demand and where construction is a cost-effective adjunct to construction related to the targeted commercial and industrial areas. Key to this effort will be leveraging existing fiber assets, deploying new fiber where necessary, and connecting this backbone to serve new and existing residences and businesses in target locations.

LMG's primary goal is to increase penetration of affordable broadband service to foster innovation, drive job creation, and stimulate economic growth. To help LMG achieve these goals, respondents should include in their responses ideas and recommendations for accomplishing the following objectives:

    a.   Increase competition to improve cost-effective internet access for residents (e.g., remote workers, home-based enterprises) and businesses that need, or will need, faster connectivity.
         i.   Provide a reliable platform for technology and research institutions that require high-speed broadband to conduct business.
        ii.   Enhance educational opportunities at universities and health care delivery services.
      iii.   Stimulate new product, application, and service development through increased bandwidth and network capacity.
      iv.   Allow businesses to focus on growing their business, not the lack of access to needed telecommunications infrastructure.
    b.   Provide discounted or no-cost 100 MB (minimum) service in low income Census tracts of Louisville to drive (re)location of select businesses to those areas.

      i. Support LMG's economic development strategy through (re)location incentives.
      ii. Drive targeted economic development efforts in specified areas of the city.
      iii. Position Louisville as a leading destination for next-generation, technology-focused business relocation.

   c. Provide discounted or no-cost gigabit service to urban anchor where gigabit service improves community development.
      i. Provide priority access to schools, libraries, community centers, and public safety agencies, all of which face increasing demand for internet access.
      ii. Prioritize extending fiber to anchor institutions to reduce gaps in overall network topology.
      iii. Provide access to nonprofits and other organizations that serve the community.

In addition, LMG anticipates that implementation of a gigabit-speed capable network will:

1. Create a platform for technology companies to create the next-generation of products and services.
2. Reduce existing and/or future government telecommunications costs while simultaneously providing faster speed and improved service.
3. Leverage and coordinate ongoing infrastructure improvement efforts to reduce network development costs.
4. Encourage competition and transparency.
5. Provide a comprehensive broadband infrastructure that can be expanded upon to serve other areas of Louisville in the future.
6. Position Louisville as a global leader in technology and innovation.

Goal 2: Provide free or heavily-discounted gigabit internet service over a wired or wireless network to underserved and disadvantaged residential areas across Louisville.

In addition to providing cutting-edge broadband service for commercial sectors, as well as residential areas with demonstrated demand, widespread access to reliable, affordable high-speed internet service is critical to ensuring that all Louisville residents are connected to the modern economy. Low-income and disadvantaged residents are often underserved by the city's current broadband infrastructure and a lack of universally-available, affordable broadband service. Overcoming geographic or financial barriers to connect all Louisville residents to the educational, cultural, and economic opportunities and resources they deserve is essential to empower city residents to be at the forefront in an increasingly borderless, digital world. Existing programs in the city that provide very low cost connectivity options for qualifying households may offer a potential model for how to roll this out at scale.

To help LMG achieve this goal, respondents are invited to submit ideas and recommendations on approaches to providing free or heavily discounted 100 MB (minimum) internet service over a wired or wireless network to underserved or disadvantaged residential areas.

Goal 3: Deliver gigabit internet service at prices comparable to other gigabit fiber communities across the nation.

To help LMG achieve this goal, respondents are invited to submit ideas and recommendations on approaches for providing this level of bandwidth at prices consistent with prices charged in gigabit communities across the nation.

FIBERTECH RESPONSE:
Fibertech envisions a strategic partnership where the City of Louisville will retain ownership of the existing fiber routes it has and the fibers in use, and will continue to pay any current access, right-of-way costs and maintenance costs. Fibertech will be granted rights to any unused fibers in place along with overlash and/or conduit right to expand the capacity as necessary for its business purposes, take over preventative, operational and other maintenance of the network for the

sections that it uses. In addition, the company will offer services to the marketplace utilizing the existing routes, as well as aggressively expand the footprint to meet commercial use of the network, offering a full suite of data connectivity services, including TDM, SONET, Ethernet, DWDM and Internet, along with dark fiber and colocation.

Specifically, for physical fiber connectivity:
- Fibertech believes that joint maintenance and operation of this network can enhance economic development opportunities. As stated above, Fibertech operates "open-access" networks allowing multiple carriers access to the network, as well as expand the network to local area businesses with last mile fiber optic connectivity. Today, Fibertech's business is split nearly evenly between carrier and enterprise business customers.
- Fibertech's vast experience will allow it to quickly expand its services to local businesses, allowing for a cost-effective broadband alternative in the area.
- With more than a decade of experience, Fibertech has active relationships with a wide variety of regional and national carrier customers that we will be happy to further enable competitively to serve businesses throughout the Louisville area. Upon agreement of a partnership, Fibertech would immediately "light" the network with optical equipment to offer managed services to area businesses – maximizing the efficiency of the existing fiber infrastructure.
- Fibertech will explore the ability to cost-effectively connect existing City facilities to the network who are not currently connected and provide connections to those locations to the City at Fibertech's cost. Fibertech will maintain the routes and utilize unused capacity for its business purposes in making fiber and high-speed connectivity available to business and carriers in the metropolitan Louisville area.
- Fibertech ill also provide the City with 12 strands of fiber for its internal use at no cost wherever it extends the existing footprint to over time.

For broadband deployment, Greenlight networks will utilize strands on both the existing City network and additional network deployed by Fibertech to provide highly discounted broadband services to City residents as network is deployed to those areas. The City can accelerate that deployment by funding fiber expansion to the areas desired, which Fibertech will provide at its cost, plus 10% for administrative overhead. The City will retain 12 fibers for its own internal use on these routes as well.

Greenlight will provide discounted internet access at speeds from 100 meg to 1 Gig to City residences.

IV.   GUIDANCE FOR RESPONSES

- Strategies included in responses to the RFI should aim for forward-looking, assertive technology solutions that create immediate advantages for users and fertile platforms for innovations in products and services that sustain our technology leadership for years to come.
- High bandwidth in the upstream direction is considered essential.

- Some or all of a respondent's proposed service offerings could initially be at speeds below the thresholds so long as the overall strategy furthers the goals of broadband innovation and development. While LMG shares a belief that ultra-high-speed broadband networks are a pre-requisite for ongoing advances in a number of disciplines, end-users in our city have a wide-range of networking needs and use-cases. We do not anticipate that all areas in Louisville would receive access to similar speeds at similar times.
- Respondents should feel free to propose alternative business models and network solutions that could be used to meet LMG's needs.

FIBERTECH RESPONSE:

Fibertech is seeking to become a strategic partner with the City of Louisville for the operation and maintenance of the existing City-owned fiber optic network in Louisville.

The company's proposal is one of a joint partnership that would be mutually beneficial to both parties. The City of Louisville would retain its existing fiber optic connectivity; would gain access to up to 12 strands on a long-term $0 lease for its internal use on any new fiber rings and lateral connections that the company builds and the ability to contract with Fibertech to further extend the fiber footprint to connect any additional City office buildings or public safety locations; as well as benefit from a revenue sharing model as described below and from an economic development relationship with a fiber-based service company with a strong reputation across our industry.

Fibertech will receive rights for long-term use of the available unused strands and overlash or other Right of Way with full access to poles, conduits and enclosures throughout the footprint; and will assume operational and maintenance responsibility where those rights are exercised. Fibertech would seek a streamlined process for securing permits to complete its network build and continue to expand it in the future. Fibertech will provide significant private investment into the market while performing proactive maintenance and restoration services on behalf of the City on its existing infrastructure.

Fibertech Networks is very interested in further exploration of the City of Louisville's local infrastructure to better understand the ability to expand the fiber count and associated routes. We would like to know the specifics of the underlying right of way agreements and gain insight into the expected costs of overbuilding and maintaining the current network footprint. We'd like to review the routes to verify available idle fiber capacities, fiber condition, construction practices, splice points, etc. All of these factors and more will provide us with the additional insight necessary to create a model that best works for both The City and Fibertech in order to ensure a positive long-term outcome.

We're extremely proud of our industry-leading service record and feel that distinction has served as the foundation of our growth from the Northeast and Mid-Atlantic regions to Midwest cities, like Columbus and Indianapolis. We currently have a small fiber lateral segment in Louisville that we provided for an educational network connection several years ago and maintain today. We have an active interest to expand to Louisville and Kentucky in particular and are prepared to invest capital to do so.

We believe that we're an ideal fit the City of Louisville to partner with. We've had a great deal of success over the last 13 years across a number of industry segments, partly because we provide a means of future-proofing organizations bandwidth availability and cost structure and partly because we have a reputation of doing what we say we're going to do for our customers and investors alike. Not terribly complicated, but we do feel we add a great deal of value. We operate a common sense business in an entrepreneurial and incredibly responsive manner - and pride ourselves on making it as easy as possible for our customers to do business with us. We're proud of our track record for outstanding customer service and the great relationships we've built with so many significant municipalities, companies and organizations with that as our foundation.

V. SCOPE OF REQUESTED INFORMATION

A. Geographic Areas

LMG invites responses that include ideas and recommendations regarding the development of a gigabit fiber network in defined geographic areas where demand for the service is likely to be sufficient, as well as expanded wired and/or wireless broadband service to underserved and disadvantaged residential areas. Comprehensive responses will examine existing resources and evaluate the feasibility of network expansion in these areas, including the necessary steps and additional resources or policy changes required to develop an expansive network.

B. Desired Network Characteristics

LMG intends to be an infrastructure and policy partner only and does not intend to act as a retail service provider or network operator. Desired network characteristics are outlined below.

General Requirements for All Technology Solutions

Gigabit Wired, Wired or Wireless Broadband

Customers should be able to attach any devices to the network, as long as they do not impair network performance. Customers must also be able to post and access any lawful content on non-discriminatory terms. Data must be encrypted while traversing the broadband network in order to ensure the security and privacy of customers.

The network must be characterized by a transport infrastructure that is physically and logically redundant and provide raw Layer 2 transport in addition to IPv4 and IPv6 Layer 3 routing. The infrastructure must be capable of providing 99.9% availability, be resilient with low latency and jitter, and ensure that packets sent and received at the network edges are identical. Finally, the network must permit the adoption of technologies such as DWDM, LTE, 802.11ac and other technologies as they become standardized or gain a significant market share.

Gigabit Network Requirements

In addition to the general requirements outlined above, LMG prefers an open network architecture that allows for multiple service providers and equal access to fiber infrastructure at reasonable wholesale cost, providing dedicated bandwidth to all customers and service providers. The network must be sufficient to support the provision of any

combination of voice, video, and data services at gigabit speed, in both upstream and downstream directions, to residents in Louisville.

C. Public Assets and Infrastructure

LMG possesses a variety of public assets and infrastructure that may be leveraged to support the development and expansion of a comprehensive telecommunications network. The use of any of these assets may be subject to certain restrictions, regulations, and/or additional authorization by other agencies. Some assets may be preempted from use due to existing contractual relationships, limitations due to tax-exempt bonds or grant funding restrictions concerning private use, and some may be removed from consideration for some other reason. Any such preemption may be disclosed at any time.

Louisville Metro Code of Ordinances

Chapter 116 of the Louisville Metro Code of Ordinances governs franchises for communication services (Louisville Metro Code of Ordinances sections 116.70 – 116.77). Please reference the requirements of this chapter when considering public assets and infrastructure.

In addition to the assets outlined below, LMG may also consider additional investments and support for broadband infrastructure expansion. The respondent is encouraged to propose additional areas where LMG could extend support.

1. Rights-of-way

LMG has over 3,000 miles of roadways and alleys. In addition, the city has an extensive network of water mains and sewers that can potentially be leveraged to support expansion of broadband infrastructure. Planned street maintenance could be utilized to coordinate any proposed work with preexisting construction schedules and these schedules may have certain flexibility to align with a potential network rollout.

2. Light and Utility Poles

LMG owns thousands of light poles across the city. If considered an optimal form of supporting wired or wireless broadband infrastructure, light poles could potentially be leveraged for aerial placement of equipment. Depending on the type of equipment required, certain poles may require concurrent upgrades or replacement at the time of installation. In addition to LMG-owned light poles, there are thousands of utility poles owned by other entities, such as LG&E. Usage of these poles would require further negotiation with the individual utilities.

3. City Support

In any future procurement that may follow the issuance of this RFI, the Department of Economic Growth and Innovation will serve as the point of contact and support for any successful future procurement respondent and will coordinate efforts with other LMG agencies to ensure a smooth and rapid deployment.

4. Market Potential

In any future procurement that may follow the issuance of this RFI, LMG anticipates partnering with sister agencies to leverage overall annual IT spending, subject to agreement by those agencies, to accelerate development of gigabit speed broadband in Louisville.

LMG is willing to work with respondents to analyze potential demand in proposed service areas and underserved and disadvantaged residential areas by helping to pull together data on existing private broadband spending and demand for gigabit service. Respondents are invited to propose additional areas in the city where network expansion supports economic growth and presents viable economic opportunity for a potential service provider.

FIBERTECH RESPONSE:

Fibertech did not have the time or resources at this time to conduct marketing and demographic research for Louisville.

Since our inception, Fibertech has secured more than 4,500 dark fiber and connectivity contracts over the networks that we've put in place. This has allowed the company to expand our footprint rapidly while expanding an alternative fiber footprint throughout the metropolitan areas that we operate within. Typically, our original core networks encompassed about 100 route miles. Today, our average network size is over 300 miles. We feel this growth can be contributed to a number of the same factors that make us the optimal partner for the City of Louisville:

- Fully-staffed, 24x7x365 Network Operations Center
- Award-winning implementation, network performance and customer service
- Strong financial position and balance sheet
- Conservative, organic customer growth
- Privately funded
- Vast experience in fiber construction, management and maintenance
- Successful, sustainable business model for open-access fiber networks
- Entrepreneurial and flexible with a service culture that supports long-term relationships
- Highly experienced sales and marketing organization
- Ability and experience in serving local and state governments, including an 11-year provider relationship with the State of Connecticut, connecting education, judicial, administrative and public safety facilities throughout the state with service commitments extending for over 20 years into the future.

The company provides both an optical services portfolio, as well as leases dark fiber capacity to local businesses and telecommunications. This includes:

- » **Dark Fiber**
- » **Metro Ethernet** – 3 Mg to 40 Gig
- » **Regional Long Haul**
- » **SONET** – up to OC 192
- » **Internet** – from 3 Mg to 10 Gig
- » **Colocation**

Dark Fiber

Dark fiber is optical fiber infrastructure that is not in use. Optical fiber conveys information in the form of light pulses. "Dark" means no light pulses are being sent. Leasing dark fiber from Fibertech frees your organization to "light" the fiber with the transmission electronics of your choice—bringing unprecedented freedom to deploy mission-critical applications independent of your telecommunication carrier's technical and scheduling constraints.

» Scalable optical networks accommodate exponential increases in voice and data traffic
» Independence from capability limits of traditional service providers
» Protocol-independent common infrastructure for multiple voice, data and storage networks
» Unlimited bandwidth for fast time-to-market with value-added products and services
» Freedom to deploy mission-critical applications at will
» Capacity to automate delivery channels
» Fixed cost, unmetered bandwidth for scalable systems
» Customizable lease terms
» Expenditures structured as either capital or operating expense

Metro Ethernet Services

Converged IP data and video - Data recovery - Business continuity - Offsite storage network - Fibertech's Ethernet service allows you to transfer the benefits of your LAN across a scalable, secure WAN. Fibertech Ethernet services provide the speed, scalability and flexibility you need to manage your business more efficiently and effectively.

As your bandwidth requirements grow, you need the communications and IT infrastructure to support it. Using standard LAN interfaces, Fibertech offers an affordable way to connect your business locations via Ethernet with the speed you need—from 3 Mg to 1 Gig. Ethernet can be used to support applications such as LAN-to-LAN connectivity, storage area networking, Internet access and business continuity solutions. Ethernet handoff via fiber optics with a 100 Base Tx interface over category 5 twisted pair cable. Gigabit Ethernet provided via 1000BaseT, 1000Base5x, or 1000BaseLX.

» **Connectivity via reliable, end-to-end fiber optics based solutions.**
» **Flexible bandwidth options, scalable to fit your growing connectivity needs.**
» **Point-to-point or dedicated ring configurations.**
» **Transparent packet transmission between locations supporting jumbo frames, VLAN tagging and VLAN stacking.**
» **24x7x365 monitoring and customer care.**
» **Maximum flexibility and control of your network.**
» **Reduced costs through efficient data transport options via fiber.**
» **Solid service level agreements.**

All Fibertech business solutions are delivered on end-to-end fiber optics that seamlessly connect all of your business locations. These directly routed services mean greater availability and flexibility compared to other legacy carriers. What's more, we own our entire 20-market network footprint, so you're assured faster provisioning times and best-in-class implementation processes that are truly in sync with your needs.

- » **Control** - Direct fiber connections between your business locations are carried end-to-end via our Fibertech network. That means you drive the network—not the other way around.
- » **Flexibility** - Scalable, on-demand bandwidth means as your business grows, so does your bandwidth.
- » **Efficiency** - 3 Mg to 1 Gig connections with the ability to size up or down as needed makes your whole IT system work smarter.

Fibertech is committed to providing a customer experience like no other. In addition to our well-earned reputation for service dependability and flexible solutions, we're dedicated to customer responsiveness and providing a first-class approach to customer service. And we have the customer success stories to prove it.

Dedicated Internet Access

Fibertech also offers a best-in-class Dedicated Internet Access service (DIA). Many of our customers purchase Dark Fiber and Point-to-Point circuits from us, and have now found that layering Internet over that same fiber infrastructure is both economical and scalable. Fibertech's Internet service consists of a secure, fiber-based, fully scalable suite of ports ranging from multiple T1s to OC-48, and incremental Ethernet speeds from 3 Mg to 10 Gb. Benefits of Fibertech Internet:

- » **Tier 1 Internet Providers** – Fibertech is only connected to Tier 1 Internet backbones, to ensure that we are providing you with the highest quality Internet.
- » **Fully-Protected Backbone Using BGP and SONET Rings** – Fibertech provides BGP on our backbone, and uses a SONET infrastructure across all of our peering connections. By doing this, it reduces the chance of downtime in the case where one of our up-stream providers has a problem with their Internet.
- » **No Oversubscription on the Metro Backbone** – Fibertech does not oversubscribe our metro backbone, so rest assured that when you order 50 Mg of Internet, you will receive your 50 Mg of Internet at all times.
- » **Scalable & Flexible Loops Topologies** – Fibertech can design and build your connection to fit your unique needs – and we build end-to-end fiber, so your infrastructure is future-proof. Fiber is the most scalable physical medium, and will grow with you as your business grows.
- » **Monitored 24x7x365** – Fibertech is watching your service at all times to provide the highest level of availability and performance.
- » **Competitive SLAs** – Fibertech stands behind our service with an industry-leading Service Level Agreement (SLA).
- » **Cost-Effective** – Fibertech can provide a total solution that is cost-effective compared to others.
- » **Additional Services** – Fibertech also provides our customers with DNS/RDNS and 8 IPs for Free.

» **Throughput Graphs** – You can order near real-time graphs of your through-put via Fibertech's On-Line Customer Portal.

Fibertech offers high-quality, high-bandwidth solutions providing you with a new level of control, scalability, and service. Our unparalleled attention to details and dedication to providing outstanding customer service makes it easier than ever to do business with us.

Colocation

Fibertech has over 5,700 square feet of Colocation space in twelve different markets. All of our space is Carrier-grade, and has been designed with a strong focus on security and redundancy. Benefits of Fibertech Colocation:

» **Robust Security** (On-Site Personnel, Key FOB, IP Cameras, Optional Lockable Cabinets).
» **Maximum Equipment Up-Time** - Redundant Power Supplies and Environmentals.
» **Flexible Rack/Cabinet Configurations** - to Accommodate 19" or 23" Equipment.
» **Carrier Neutral Facility** - so you can connect to other vendors.
» **Thorough and Professional Implementation Process**
» **Proximity to Fibertech POP** - for cost-effective point-to-point or Internet circuits (optional services)
» **Flexibility**

VI.   SUPPORTERS OF THE PROJECT

Respondents should be aware that LMG has discussed this RFI with a number of entities in the city, who have expressed support for the projects described in this RFI (referred to hereafter in the aggregate as "Supporters.") To the extent useful to the respondent, the response should refer to ways in which partnerships with one or more of the Supporters would improve the ability of the Respondent to meet the goals of this RFI.

The Supporters include:
1. Institutions of Higher Education
2. Health Care Facilities
3. Non-City Government Agencies
4. Businesses
5. Commercial Real Estate Owners/Developers
6. Multiple Dwelling Unit Owners/Developers

FIBERTECH RESPONSE:

Fibertech owns and operates fiber optic networks in 29 other cities across the Northeast. Since 2000, it has leased dark and lit capacity on these networks delivering high-speed, data-intensive

services to businesses and consumers, the company is offering virtually unlimited bandwidth and unequaled control of valuable network assets throughout metropolitan areas at a fixed cost.

Fibertech's unique "open-access" design enables telecommunications, financial, educational and Internet entities the ability to offer on-net, facilities-based and high bandwidth intensive services. The company is building "carrier-ready" networks strategically connecting local Telco central offices, carrier hotels, data centers and other traffic aggregation points that will be able to provide a carrier level of service to the City of Louisville.

Another core competency of the company is its ability to extend these benefits to the end user. Targeting municipalities, educational institutions, office parks, financial institutions and large businesses, Fibertech is able to extend the benefits of its fiber networks directly into these buildings.

Fibertech employs nearly 280 people today and intend to add to that total to support our expansion throughout Kentucky. We will utilize a direct sales force which will be expanded with several new hires in the state, supported by a proactive direct marketing team designed to build awareness of our offerings in each market.

Because of Fibertech's experience, there are a number of benefits that we believe we can bring to the table. This includes experience with issues such as build, construct times, rights of way, readiness of pole attachments and conduits, fiber optic specifications, installations, intra-segment cable continuity and testing of installed cable plant, along with our 13-year history of constructing, maintaining and operating over 10,000 route miles of commercial metropolitan fiber networks across 11 states.

Fibertech would immediately leverage these capabilities to expand the existing City of Louisville footprint and extend these benefits to local businesses. In addition it would naturally attract new and existing carrier customers to the area, increasing broadband competition in the city.

VII. INFORMATION ABOUT THE RESPONDENT

The response should include general information about the respondent, such as:

1. Background information including the following details for each company or organization represented in the response: company name, company address, company web page, description of products and services, professional strengths and abilities.

FIBERTECH RESPONSE:
Fibertech Networks

300 Meridian Centre
Rochester, NY 14618
585-697-5100 (p)
585-442-8845 (f)
www.fibertech.com

Fibertech has built core metro networks in 29 mid-size cities in the Eastern and Central US. The company leverages these networks to build private networks similar to the size and scope of this RFI to the end user. Targeting municipalities, educational institutions, office parks, financial institutions and large businesses, Fibertech is able to extend the benefits of its fiber networks directly into these companies.

Fibertech is a privately held telecommunications company founded in May 2000. The company designs, builds and leases high performance, state-of-the-art metro-area fiber optic networks. These fiber optic networks are provided so that customers can transport voice, data and video traffic from one location to another.

Fibertech currently has more than 280 employees across the departments of Operations, Engineering, Finance, Legal, and Sales and Marketing. The company executives are long-time telecommunications and cable veterans and the employee base has a broad depth of industry experience.

2. Identification of a lead company or organization if more than one is represented in the response.

FIBERTECH RESPONSE:
Fibertech Networks
300 Meridian Centre
Rochester, NY 14618
585-697-5100 (p)
585-442-8845 (f)
www.fibertech.com

3. Contact information for the company or group's primary contact. Respondents may provide more than one contact, but should designate only one primary contact. The following details should be included for each contact: name, title, company name, address, phone number and email address.

FIBERTECH RESPONSE:

Fibertech Networks primary contact for questions on this RFI response should be directed at the following:

Mike Hurley
Vice President, Sales and Marketing
300 Meridian Centre
Rochester, NY 14618
585-697-5104 (p)
585-568-8499 (f)
mhurley@fibertech.com

The company reserves the right to add other secondary contacts if deemed appropriate throughout the initial discussion of this project.

_____

4. Description of the respondent's experience financing, designing, building, provisioning and/or operating broadband networks or other major infrastructure projects.

_____

FIBERTECH RESPONSE:
Fibertech believes every one of its 29 networks has helped assist economic development efforts indirectly through the promotion of a new broadband network that allows local businesses fiber optic connectivity options. The company has worked with numerous towns, cities and municipalities across its entire footprint with marketing efforts. Specifically, in Rochester, Fibertech works with the Greater Rochester Enterprise (GRE) in its recruitment with companies to the area. The GRE has compiled a map that highlights Fibertech's dense infrastructure that extends well into the suburban areas of the City as Rochester tries to market itself as a low-cost high technology corridor. They use our map often touting the bandwidth availability throughout the entire community.

The State of Connecticut also actively promotes the availability of Fiber throughout the state, largely based on our footprint. Fibertech currently is providing the Department of Public Safety a dark fiber network that will be servicing over 600 Public Safety locations in Connecticut, the network extending to the four corners of the State. Fibertech worked very closely with the State with the design of the network to create multiple diversely routed dark fiber rings to ensure as much resiliency and reliability for such an important network which services the public. The project was rolled out in several phases and was delivered to the State on-time and on budget.

Fibertech also worked with the Connecticut Department of Information Technology (DOIT) to build and operate the largest, state-wide communications network of its kind. The Connecticut Education Network (CEN) interconnects every public school district, public and private higher education institution and municipal library system throughout the State. Fibertech also connected

the DOIT data center with municipalities and city government buildings throughout the State, which allows them to interconnect between locations and gain Internet access, storage access facilities, and disaster recovery and distance learning capabilities.

Fibertech has established itself as a leader in building and operating fiber optic networks throughout mid-size cities in the Eastern and Central regions of the United States. Helping to fulfill the promise of delivering high-speed, data-intensive services to businesses and consumers, the company is offering virtually unlimited bandwidth and unequaled control of valuable network assets throughout metropolitan areas at a fixed cost.

Fibertech's unique "open-access" design enables telecommunications, financial, educational and Internet entities the ability to offer on-net, facilities-based and high bandwidth intensive services. The company is building "carrier-ready" networks strategically connecting local Telco central offices, carrier hotels, data centers and other traffic aggregation points that will be able to provide a carrier level of service to the City of Louisville.

Another core competency of the company is its ability to extend these benefits to the end user. Targeting municipalities, educational institutions, office parks, financial institutions and large businesses, Fibertech is able to extend the benefits of its fiber networks directly into these buildings.

Because of Fibertech's experience, there are a number of benefits that we believe we can bring to the table The City of Louisville, including experience with issues such as build, construct times, rights of way, readiness of pole attachments and conduits, fiber optic specifications, installations, intra-segment cable continuity and testing of installed cable plant, along with our 13-year history of constructing, maintaining and operating over 7,500 route miles of commercial metropolitan fiber networks across 11 states.

_____

5. Description of any test results, pilot projects or experiments involving new network technologies or network elements that might be incorporated into respondent's proposed solution(s).

_____

FIBERTECH RESPONSE:
At this time Fibertech does not have any relevant information to add to its proposal.

_____

6. Sufficient information to demonstrate the respondent's financial ability to engage in a project of the magnitude described in the response.

FIBERTECH RESPONSE:
Fibertech has provided audited financial statements within its response.

7. Description of any current or past contractual relationships, partnerships, collaborations or other working relationships with LMG or any of its sister agencies.

FIBERTECH RESPONSE:
Fibertech does not have any current or past contractual relationships with LMG.

VIII. AREAS OF COOPERATION

To the extent not covered in previous responses, this section highlights ways that LMG can cooperate with respondents to improve the business case for proposed solutions.

Specifically, this section could include:

1. Resources and facilities: Explanation of need for access to community assets and resources. Respondents should also address the relative importance and impact of variations in terms or more flexibility with respect to accessing the following types of community assets, facilities, and policies:
   a. Pole Attachments
   b. Utility conduits
   c. Dark fiber

   d. Backhaul or ISP partnerships involving local, statewide or regional fiber assets
   e. Public Rights of Way
   f. Undergrounding policies
   g. Other community assets, facilities (including radio towers) or policies not specifically mentioned above

2. Regulatory environment: Description of any rules or regulations at the federal, state or local level that could impact the feasibility or underlying economics associated with the proposed solutions. Responses should also include an explanation of any forms of proposed regulatory relief, including streamlined permitting, which could improve the economic case for the business models or network solutions proposed or for other network solutions that respondents considered but dismissed as uneconomic due to existing regulations.

3. Contracting issues: Explanation of any material considerations or expectations that respondents have with respect to any of the following issues likely to be negotiated during any future Requests for Proposal:
   a. Intellectual property
   b. Insurance

    c.   Indemnities
    d.   Warranties
    e.   Dispute resolution
    f.   Other contracting issues not specifically listed above

4.   <u>Other partnership or revenue opportunities</u>: Discussion of any other types of partnerships or working relationships between respondents and Supporters which could improve the business case for respondents to partner with one or more Supporters. For example, a company may work with universities and the surrounding communities to develop partnerships that allow the company to deliver voice, video and data services, and/or to pilot cutting-edge new products, recruit new employees, or enter branding and marketing agreements.

We encourage respondents to be creative and suggest other types of partnerships or business opportunities of interest.

FIBERTECH RESPONSE:
Fibertech believes that our ongoing relationship with the City will quickly expand broadband availability in the area and the company has the resources and personnel to support and expand the network for years to come. Our proven growth model ensures the most robust partnership for the City and will work with it to provide the most beneficial relationship to both parties. As stated above, we feel we are an ideal partner in this project and look forward to continuing the discussion and help Louisville build a world-class infrastructure that businesses, telecommunications carriers and residences will enjoy.